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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,735	04/04/2001	Jian-Kang Zhu	205645US20	9738

22850 7590 08/06/2002

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ARLINGTON, VA 22202

EXAMINER
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BAUM, STUART F

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 08/06/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/824,735

Applicant(s)

ZHU ET AL.

Examiner

Stuart Baum

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-42 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-22, and 32-35 drawn to an isolated polynucleotide of SEQ ID NO:1 encoding a polypeptide of SEQ ID NO:2, operably linked to a promoter, a vector comprising said sequences, a host cell, a plant cell, a transgenic plant, a method of making a transgenic plant and a method of increasing the salt tolerance of a plant, classified in class 800 subclass 290 for example.
- II. Claims 23-25 are drawn to a process of screening for a polynucleotide, classified in class 435 subclass 6 for example.
- III. Claim 26, and 28 are drawn to a process for detecting a nucleic acid using a probe or primer comprising at least 15 consecutive nucleotides, classified in class 435 subclass 6 for example.
- IV. Claims 27 and 29 are drawn to a method of producing a nucleic acid using PCR classified in class 435 subclass 91.2 for example.
- V. Claims 30-31 are drawn to a method of making a SOS2 protein, classified in class 435 subclass 69.1 for example.
- VI. Claim 36 drawn to a method of increasing the salt tolerance of a plant comprising enhancing the expression of the SOS2 gene, classified in class 800 subclass 290 for example.

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VII. Claims 37-42 are drawn to an isolated polypeptide of SEQ ID NO:2 classified in class 530 subclass 370 for example.

Inventions I and VII are unrelated to each other, as are Inventions III-VI, unrelated to each other. Applicant is reminded that nucleotide sequences either encoding different proteins or specifying specific expression patterns are structurally distinct chemical compounds and are unrelated to one another, as are different proteins structurally distinct chemical compounds and unrelated to one another. These sequences are thus deemed to normally constitute **independent and distinct** inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq (see MPEP 803.04 and 2434). This requirement is not to be construed as a requirement for an election of species, since each nucleotide and amino acid sequence is not a member of a single genus of invention, but constitutes an independent and patentably distinct invention.

Inventions I, and VII are distinct from each other because the starting materials, method steps and end products are distinct and unrelated to each other. Furthermore, the protein of Invention VII could be made by a process other than the expression of the nucleic acid of Invention I, such as chemical synthesis or purification from the natural source, and the DNA of Invention I may be used for a process other than the production of a protein, such as a nucleic acid hybridization. Lastly, DNA and protein differ in composition, structure and function.

Inventions I and V are distinct from each other because the method steps, starting materials and end products are distinct and unrelated to each other. The vectors used in Invention V would be specific to protein production and purification whereas the vectors and

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nucleic acids used in invention I would be specific for amplification of the specific nucleic acid or expression of the protein in an in vivo environment without the purpose of isolating the protein.

Inventions II-IV are all distinct from each other because the method steps, starting materials and end products are distinct and unrelated to each other.

Inventions I and VII, II-IV, V and VI, are all distinct from each other because the starting materials, method steps and end products are distinct and unrelated to each other.

Each of Inventions I-VII are capable of being separately made, independently used, and the patentability of one does not render the others obvious or unpatentable.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, fields of search, and classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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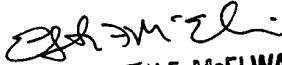
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart Baum whose telephone number is (703) 305-6997. The examiner can normally be reached on Monday-Friday 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (703) 306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 or (703) 305-3014 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the legal analyst, Kim Davis, whose telephone number is (703) 305-3015  
Stuart Baum Ph.D.

July 26, 2002

  
ELIZABETH F. McELWAIN  
PRIMARY EXAMINER  
GROUP 1600